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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/506,671

04/07/2005

Kazuhiko Sugiyama

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EXAMINER

KEE, FANNIE C

ART UNIT

PAPER NUMBER

3679

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

03/08/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/506,671

Applicant(s)

SUGIYAMA ET AL.

Examiner

Fannie C. Kee

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 April 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 7-10 and 12 is/are rejected.
- 7) ☒ Claim(s) 4-6, 11 and 13 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 April 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date See Continuation Sheet.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :20040916;20041229;20060104;20060221.

DETAILED ACTION

Drawings

1. The drawings are objected to because in Figure 3, the cross-hatching is incorrect for the tubular joint members.
2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: Figure 7 – reference element “44” (page 31, line 1) and Figure 9 – reference element “64” (page 40, line 20).
3. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

4. Applicant is reminded of the proper format for an abstract of the disclosure.

The abstract should be limited to a single paragraph on a separate sheet within the range of 50 to 150 words (generally held to be at 15 lines of text or less). It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited.

5. The abstract of the disclosure is objected to because it exceeds 15 lines of text and is therefore, too long; the reference elements incorporated in the abstract need to be removed; and, grammar must be corrected, i.e., add the word --with-- after the words “intimate contact” at the end of the sentence on line 12.

Correction is required. See MPEP § 608.01(b).

6. The disclosure is objected to because of the following informalities:
- a. Page 2, line 10 – add the word --the-- between the words “retains” and “ability”.
 - b. Page 9, line 15 – add the word --which-- between the words “nut” and “are”.
 - c. Page 12, line 7 – replace the words “the same” with the words --Figure 3--.
 - d. Page 16, line 21 – add the words --second joint-- before the word “member”.
 - e. Page 16, line 22 – add the words --first joint-- before the word “member”.
 - f. Page 20, line 13 – add the words --second joint-- before the word “member”.
 - g. Page 20, line 15 – add the words --first joint-- before the word “member”.

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- h. Page 21, line 4 – add the word --a-- between the words “of” and “pipe”.
- i. Page 26, line 1 – add the word --a-- between the words “of” and “pipe”.
- j. Page 30, line 21 – add the word --a-- between the words “of” and “pipe”.
- k. Page 35, line 19 – add the word --a-- between the words “of” and “pipe”.
- l. Page 40, line 15 – add the word --a-- between the words “of” and “pipe”.
- m. Page 46, line 4 – add the word --a-- between the words “of” and “pipe”.
- n. Page 46, line 21 – add the word --which-- after the words “a view”.

Correction is required.

Claim Objections

- 7. Claim 5 is objected to because of the following informalities: replace the word “projecting” between the words “axially” and “beyond” with the word --projects-- in line 4.
- 8. Claim 10 is objected to because of the following informalities: replace the word “flange” between the words “other” and “member” with the word --joint-- in line 3.

Correction is required.

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. Claims 1 and 7/1 are rejected under 35 U.S.C. 102(b) as being anticipated by Boitnott et al U.S. Patent No. 2,726,104.

With regard to claim 1 and as seen in Figure 1, Boitnott et al disclose a pipe joint comprising a first 11 and a second 10 tubular joint member of synthetic resin (column 2, lines 30-31), a synthetic resin gasket 16,17 interposed between abutting portions of the joint members and screw means 12 for joining the joint members, the pipe joint being characterized in that the first joint member is provided in an abutting end face thereof with an annular recessed portion 15 having an opening remaining therein with the gasket entirely fitted therein, the second joint member being provided with an annular ridge 14 on an abutting end face thereof, the ridge being fitted in the opening of the recessed portion with the gasket fitted in the recessed portion, an outer surface of the ridge of the second joint member being pressed against an inner surface of the recessed portion of the first joint member with the gasket interposed between the surfaces in intimate contact therewith approximately over the entire surface areas when the pipe joint is properly tightened up, a portion of the abutting end face of the first joint member positioned radially inwardly of the recessed portion being then in intimate contact with a portion of the abutting end face of the second joint member positioned radially inwardly of the ridge

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approximately over the entire surface areas thereof, a portion of the abutting end face of the first joint member positioned radially outwardly of the recessed portion being then in intimate contact with a portion of the abutting end face of the second joint member positioned radially outwardly of the ridge approximately over the entire surface areas thereof.

With regard to claim 7/1, Boitnott et al disclose when the pipe joint is manually tightened up, a first gap is present between the portion of the abutting end face of the first joint member positioned radially inwardly of the recessed portion and the portion of the abutting end face of the second joint member positioned radially inwardly of the ridge, and a second gap greater than the first gap is present between the portion of the abutting end face of the first joint member positioned radially outwardly of the recessed portion and the portion of the abutting end face of the second joint member positioned radially outwardly of the ridge.

Note: the method of forming the device is not germane to the issue of patentability of the device itself. Therefore, this limitation is given little patentable weight.

11. Claims 2, 7/2, 9/2, 10/9/2, and 12/9/2 are rejected under 35 U.S.C. 102(b) as being anticipated by Folkard GB Patent No. 745,847.

With regard to claim 2, Folkard discloses a pipe joint comprising a first 15 and a second 11 tubular joint member of synthetic resin, and screw means 10,14 for joining the joint members, the pipe joint being characterized in that the first joint member is provided with an annular recessed portion (portion on left next to 16) in an abutting end face thereof, the second joint

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member being provided with an annular ridge (portion on right next to 12) on an abutting end face thereof, the ridge of the second joint member being fitted in the recessed portion of the first joint member, with an outer surface of the ridge in intimate contact with an inner surface of the recessed portion approximately over the entire surface areas when the pipe joint is properly tightened up, a portion of the abutting end face of the first joint member positioned radially inwardly of the recessed portion being then in intimate contact with a portion of the abutting end face of the second joint member positioned radially inwardly of the ridge approximately over the entire surface areas thereof, a portion of the abutting end face of the first joint member positioned radially outwardly of the recessed portion being then in intimate contact with a portion of the abutting end face of the second joint member positioned radially outwardly of the ridge approximately over the entire surface areas thereof.

With regard to claim 7, Folkard discloses when the pipe joint is manually tightened up, a first gap is present between the portion of the abutting end face of the first joint member positioned radially inwardly of the recessed portion and the portion of the abutting end face of the second joint member positioned radially inwardly of the ridge, and a second gap greater than the first gap is present between the portion of the abutting end face of the first joint member positioned radially outwardly of the recessed portion and the portion of the abutting end face of the second joint member positioned radially outwardly of the ridge.

Note: the method of forming the device is not germane to the issue of patentability of the device itself. Therefore, this limitation is given little patentable weight.

With regard to claim 9/2, Folkard discloses each of the joint members being provided at the abutting end face thereof with a flange portion (portion on right next to 13 and portion on left next to 17), and the screw means comprises an annular male screw member 10 having a forward end face in bearing contact with the flange portion of one of the joint members, and a cap nut 14 fitted around the other joint member and having a top wall in bearing contact with the flange portion of said other joint member, the cap nut being screwed on the male screw member.

With regard to claim 10/9/2, Folkard discloses at least one of a space between the male screw member and the flange portion of said one joint member and a space between the top wall of the cap nut and the flange portion of said other flange member having disposed therein a biasing member 13,17 for biasing one of the joint members toward the other joint member.

With regard to claim 12/9/2, Folkard discloses a synthetic resin thrust ring 13 being interposed between the cap nut top wall and the flange portion of the joint member.

12. Claims 3 and 8/3 are rejected under 35 U.S.C. 102(b) as being anticipated by Kingsford et al U.S. Patent No. 5,645,301.

With regard to claim 3 and as seen in Figure 5A, Kingsford et al disclose a pipe joint comprising a first 140 and a second 138 tubular joint member of synthetic resin, a synthetic resin gasket 142 interposed between abutting portions of the joint members and screw means 173 for joining the joint members, the pipe joint being characterized in that each of the joint members is

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provided in an abutting end face thereof with an annular recessed portion 156,158 for forming a portion for accommodating the gasket therein when the joint members are butted against each other, the gasket being in intimate contact with an inner surface of the recessed portion of the first joint member approximately over the entire area thereof when the pipe joint is properly tightened up, a surface portion of the gasket exposed from the same recessed portion being then in intimate contact with an inner surface of the recessed portion of the second joint member approximately over the entire area thereof, a portion of the abutting end face of the first joint member positioned radially inwardly of the recessed portion thereof being then in intimate contact with a portion of the abutting end face of the second joint member positioned radially inwardly of the recessed portion thereof approximately over the entire surface areas thereof, a portion of the abutting end face of the first joint member positioned radially outwardly of the recessed portion thereof being then in intimate contact with a portion of the abutting end face of the second joint member positioned radially outwardly of the recessed portion thereof approximately over the entire surface areas thereof.

With regard to claim 8/3, Kingsford et al disclose when the pipe joint is manually tightened up, a first gap is present between the portion of the abutting end face of the first joint member positioned radially inwardly of the recessed portion thereof and the portion of the abutting end face of the second joint member positioned radially inwardly of the recessed portion thereof, and a second gap greater than the first gap is present between the portion of the abutting end face of the first joint member positioned radially outwardly of the recessed portion thereof

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and the portion of the abutting end face of the second joint member positioned radially outwardly of the recessed portion thereof.

Note: the method of forming the device is not germane to the issue of patentability of the device itself. Therefore, this limitation is given little patentable weight.

Allowable Subject Matter

13. Claims 9/1, 10/9/1, 11/9/1, 12/9/1, 13/12/9/1, 11/9/2, 13/12/9/2, 4/3, 8/4/3, 9/4/3, 10/9/4/3, 11/9/4/3, 12/9/4/3, 13/12/9/4/3, 5/3, 8/5/3, 9/5/3, 10/9/5/3, 11/9/5/3, 12/9/5/3, 13/12/9/5/3, 6/3, 8/6/3, 9/6/3, 10/9/6/3, 11/9/6/3, 12/9/6/3, and 13/12/9/6/3 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

With regard to claim 9/1, the prior art of record does not teach or suggest screw means comprised of an annular male screw member having a forward end face in bearing contact with the flange portion of one of the joint members, and a cap nut fitted around the other joint member and having a top wall in bearing contact with the flange portion of the other joint member where the cap nut is screwed onto the male screw member in combination with the pipe joint of claim 1.

Claims 10/9/1, 11/9/1, 12/9/1 and 13/12/9/1 depend from claim 9/1 and therefore, will be found to be allowable should claim 9/1 be found allowable as they depend from claim 9/1.

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With regard to claim 11/9/2, the prior art of record does not teach or suggest an annular clearance being formed inside the cap nut around the flange portions of the joint members with an annular spacer, and a biasing member in a space between the cap nut top wall and the spacer and a space between the male screw member and the spacer in combination with the pipe joint of claims 2 and 9.

With regard to claim 13/12/9/2, the prior art of record does not teach or suggest the thrust ring having an outside diameter larger than the inside diameter of the cap nut where the cap nut has an annular recess formed in an inner periphery for accommodating an outer peripheral edge of the thrust ring in combination with the pipe joint of claims 2, 9, and 12.

With regard to claim 4/3, the prior art of record does not teach or suggest where the portion of the abutting end face of the first joint member positioned radially inwardly of the recessed portion thereof axially projects beyond the radially outward portion thereof and where the portion of the abutting end face of the second joint member radially inward of the recessed portion thereof axially projects beyond the radially outward portion thereof in combination with the pipe joint of claim 3.

Claims 8/4/3, 9/4/3, 10/9/4/3, 11/9/4/3, 12/9/4/3, and 13/12/9/4/3 depend from claim 4/3 and therefore, will be found to be allowable should claim 4/3 be found allowable as they depend from claim 4/3.

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With regard to claim 5/3, the prior art of record does not teach or suggest where the portion of the abutting end face of the first joint member positioned radially inwardly of the recessed portion thereof is flush with the bottom surface of the recessed portion thereof, where the radially outward portion of the first joint member axially projects beyond the bottom surface of the recessed portion thereof, where the portion of the abutting end face of the second joint member radially inward of the recessed portion thereof axially projects beyond the bottom surface of the recessed portion thereof, and where the radially outward portion of the second joint member is axially recessed from the bottom surface of the recessed portion thereof in combination with the pipe joint of claim 3.

Claims 8/5/3, 9/5/3, 10/9/5/3, 11/9/5/3, 12/9/5/3, and 13/12/9/5/3 depend from claim 5/3 and therefore, will be found to be allowable should claim 5/3 be found allowable as they depend from claim 5/3.

With regard to claim 6/3, the prior art of record does not teach or suggest where the portion of the abutting end face of the first joint member positioned radially inwardly of the recessed portion thereof is recessed from the bottom surface of the recessed portion thereof, where the radially outward portion of the first joint member axially projects beyond the bottom surface of the recessed portion thereof, where the portion of the abutting end face of the second joint member radially inward of the recessed portion thereof axially projects beyond the bottom surface of the recessed portion thereof, and where the radially outward portion of the second

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joint member is axially recessed from the bottom surface of the recessed portion thereof in combination with the pipe joint of claim 3.

Claims 8/6/3, 9/6/3, 10/9/6/3, 11/9/6/3, 12/9/6/3, and 13/12/9/6/3 depend from claim 6/3 and therefore, will be found to be allowable should claim 6/3 be found allowable as they depend from claim 6/3.

With regard to claim 9/3, the prior art of record does not teach or suggest screw means comprised of an annular male screw member having a forward end face in bearing contact with the flange portion of one of the joint members, and a cap nut fitted around the other joint member and having a top wall in bearing contact with the flange portion of the other joint member where the cap nut is screwed onto the male screw member in combination with the pipe joint of claim 3.

Claims 10/9/3, 11/9/3, 12/9/3 and 13/12/9/3 depend from claim 9/3 and therefore, will be found to be allowable should claim 9/3 be found allowable as they depend from claim 9/3.

Conclusion

14. Miyake is being cited to show two tubular members with a recessed portion and an annular ridge. Weigl et al is being cited to show two tubular members with a gasket disposed between abutting portions of the tubular members.

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15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fannie C. Kee whose telephone number is (571) 272-1820. The examiner can normally be reached on 8:30 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on (571) 272-7087. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Fannie C. Kee
March 5, 2007



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